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SCHOOLS

Science abounds at Winchester's Ambrose School during first in a generation fair

CHRIS STEVENS | CORRESPONDENT

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Laura Ramsey watches her experiment, what happens to elephant toothpaste if more hydrogen peroxide is added, blossom during the Ambrose School's science fair, held on Thursday, March 5, 2026. WINCHESTER NEWS STAFF PHOTO/CHRIS STEVENS

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You could blame the Muraco School for the fact that the Ambros
became the site of a raucously rambunctious science fair on March 5.

"They were the inspiration," said parent volunteer Karen Kinnaman, who spearheaded the event. "They put on a huge science fair every year."

Olivia (far left) and Mark (far right) Serafina determined which fruit, kiwi, strawberries or banana, had the most DNA during the Ambrose School's science fair. WINCHESTER NEWS STAFF PHOTO/CHRIS STEVENS

Kinnaman said it's gotten so big, Muraco had to move their science fair to the high school, which got some parents to thinking, "Why aren't we doing this?"

After a year of planning, dozens of students filled the Ambrose cafeteria on a drizzly Thursday evening, ready to defend their experiments to parents, peers and educators.

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Isabelle Mancini was a tiny bundle of animated excitement as she explained why the Earth had layers. She brandished a graduated cylinder that had a layers of honey, maple syrup, colored water and hand sanitizer, each representing a layer of the earth. Mancini said the honey represented the densest layer and the hand sanitizer, which floated on top, the least dense layer.

"If you shook up the Earth, it would be all mixed up," she said, shaking another cylinder that had been filled with the same graduated layers, turning the contents into an amber-colored concoction. "But you can't shake the Earth up."

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Rosaline Ready (left) and Isabella Mancini talked about the Earth's layers during the Ambrose School's science fair. WINCHESTER NEWS STAFF PHOTO/CHRIS STEVENS

Therefore she and partner Rosaline Ready's hypothesis was that since you can't shake up the Earth, it settles into layers.

When asked where they came up with the idea for their project, Mancini said they learned about the Earth's layers in science class "and we loved the idea so much we came up with an experiment."

Students get to try their hand at making Boston Dynamics Robot Dog sit, stay and fetch during the science fair. WINCHESTER NEWS STAFF PHOTO/CHRIS STEVENS

Kinnaman said one of the main goals behind the fair was to have
completely student driven. They wanted the kids to ask age appropriate

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questions and find the answers themselves.

She added they made it non-competitive in an attempt to deter parents from helping too much with the projects.

However, Principal Andrea Phelan said there was a prize involved. The class with the most participants would receive a visit from Boston Dynamics' Robo Dog, who was on hand and doing demonstrations in the lobby.

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Turns out there was a tie between the second grade and fourth grade and Phelan said Boston Dynamics would coordinate a visit to both classes.

What do kids know about science?

Turns out – quite a bit.

One student asked herself how she could learn to ski as fast as Olympic gold medalist Mikaela Schiffrin. Kinnaman said that led to a disc
and display on friction.

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Bobby, Matthew and Chance tackled lava lamps for their experiment the Ambrose School's science fair.
WINCHESTER NEWS STAFF PHOTO/CHRIS STEVENS

Third graders Matthew, Chance and Bobby wondered if temperature had an impact on the chemical reaction in a lava lamp.

Spoiler alert – it does.

The boys dropped Alka-Seltzer tablets into a warm, red, water/oil mixture and also into a cold, blue, water/oil mixture to test their hypothe

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"We figured out that cold water makes more bubbles," said Bobby. "The cold doesn't dissolve as fast so the result is the temperature does affect how the lava works."

Students were asked to come up with hypothesis and a procedure to prove (or disprove) the ques
the Ambrose School's science fair on March 5. WINCHESTER NEWS STAFF PHOTO/CHRIS STEVENS

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There were bridges built out of toothpicks and gumdrops, tests on the solubility of markers, graphs to show which liquids of a given set would freeze first and an experiment with elephant toothpaste, which might not be what you think it is.

Vivienne Pallone and Laura Ramsey queried what would happen to elephant toothpaste, which is hydrogen peroxide, dish soap and yeast, activated with warm water, all mixed together in a water bottle, if more hydrogen peroxide was added. The pair measured the height and length of times of the reactions and charted them on a graph after each addition of more hydrogen peroxide.

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"I like science," declared Ramsey. "It's just cool to watch things explode."

Mark and Olivia Serafina, in first and fourth grade respectively, teamed up to prove which fruit has the most DNA while fourth graders Remy Monchal and Andrew Paolino teamed up to discover which fruit was the dirtiest.

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Andrew Paolino (left) and Remy Monchal proved that people should always wash their fruits and veggies before eating them during the Ambrose School's science fair. WINCHESTER NEWS STAFF PHOTO/CHRIS STEVENS

The strawberry had the most DNA, but Paolino said their experiment was "truly disgusting."

Monchal said they took an orange, lime, banana, lemon, grapes and an apple then separated them into four categories; unwashed, vinegar wash, baking soda wash, and plain water wash. Then they swabbed each piece of fruit in each category and transferred them onto agar plates, put the plates in an incubator (a tote bag on top of a boiler) and observed the plates at 48 hours, 72 hours and 96 hours, he explained.

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"The orange was the dirtiest," Paolino said. "The apple was the cleanest."

Their hypothesis was incorrect, however, in that they were sure the banana would be the dirtiest. But their second hypothesis, that the vinegar would do the best job cleaning the fruit, was correct, according to their charts.

When asked what they learned, Paolino said to always wash your fruit, especially your oranges. Then he pointed to the bottom of their conclusion where the boys asked: "Orange you glad we did this experiment?"

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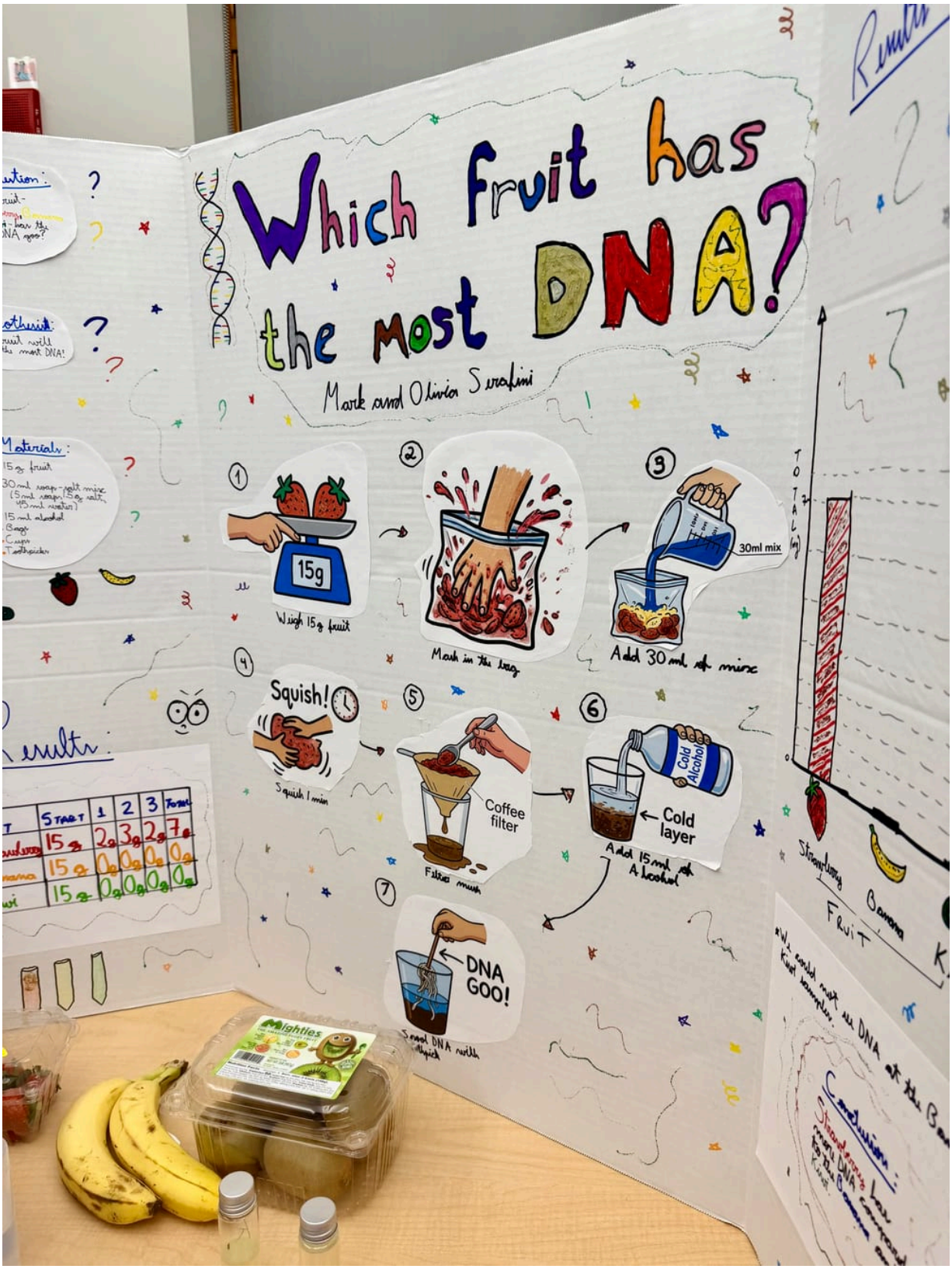

Students not only had to pose a scientific question, but they had to explain their procedure and chart the results of how they proved (or disproved) their hypothesis during the Ambrose School's science fair. WINCHESTER NEWS STAFF PHOTO/CHRIS STEVENS

Phelan seemed thrilled with all of the experiments and level of participation. She called the night an amazing opportunity for st

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pick something outside of school that they were interested in and see how they could turn it into an experiment.

"It's exciting to see what they're interested in," she said.

Chris Stevens is an award-winning journalist who has spent 25 years chasing, editing and photographing stories on the North Shore. She is the co-founder and managing editor of Gotta Know Medford.

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Winchester's Science Olympiad, like most things, began small. Yet what began as a

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modest club for fun, has grown into something respected by the entire Science Olympiad community throughout the nation. Every Friday, dedicated Winchester High School students gather for two hours in weekly club meetings, to prepare for

XIYUE ERIC HAN | CORRESPONDENT

March 16, 2026

Everyone likes to be recognized for their efforts and the Ambrose School is no different. The school recently received an A from the state Department of Elementary and Secondary Education (DESE), being named a School of Recognition. "It's very exciting," said Ambrose Principal Andrea Phelan. A School of Recognition

CHRIS STEVENS | CORRESPONDENT

March 12, 2026

SCHOOLS

Winchester High student Lucas Yang heads to Capitol on Senate Youth Program

Being called to the principal's office usually means trouble. For Lucas Yang, sitting in his principal's office was nerve-racking for a different reason. Sitting there in early December, he learned he had been chosen as one of two Massachusetts students in the U.S. Senate Youth Program. Two

TAVISHI CHATTOPADHYAY | CORRESPONDENT

March 10, 2026

SCHOOLS

Winchester resident, Austin Prep student joins 'The Movement Family'

The following was submitted by Austin Preparatory School: Brady McLaren '26, of Winchester, spends his Wednesday nights serving others. The Austin Prep junior, who attends the independent Catholic school in Reading, travels each week with classmates to volunteer with The Movement Family, a grassroots nonprofit founded by Michael Gorman that

March 5, 2026

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NEWS

Winchester ZBA waives town regulations to move Washington/Swanton project along

Town officials have approved waivers of regulations for a residential/commercial development project at Washington and Swanton streets. The Zoning Board of Appeals (ZBA) on March 19 approved the waivers for a 40B project at 278-292 Washington St. and 12 and 16-20 Swanton St. in a special meeting preceding a

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John Bellaire, 22, among youngest townwide winners in Winchester history

He won all eight precincts after a door-to-door campaign that emphasized direct voter contact over institutional backing.

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Network for Social Justice to celebrate 35th anniversary

The following was submitted by the Network for Social Justice: The Network For Social

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Winchester Community Music School presents Jazz

The following was submitted by the Winchester Community Music School: On

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Justice turns 35 this spring! There will be a celebration on Saturday, April 11, from 7-9:30 p.m., at the Sons of Italy, 117 Swanton St., Winchester. Connect with your local friends and neighbors as

March 25, 2026

Saturday, March 28, join the community at Winchester Community Music School, 407 Highland Ave., for a Jazz Jam Session, an afternoon of fun, spontaneous jazz playing, beginning at 3 p.m. Instrumentalists and vocalists of all skill levels are

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